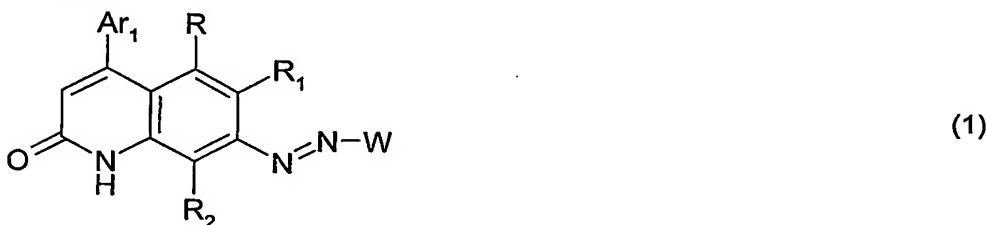


What is claimed is:

1. A monoazoquinolone pigment which, in one of its tautomeric forms, corresponds to formula



wherein

W is unsubstituted or substituted C₆-C₂₄aryl or unsubstituted or substituted heteroaryl or is a radical of formula



wherein

Ar₂ is unsubstituted or substituted C₆-C₂₄aryl or unsubstituted or substituted heteroaryl,
Ar₁ is unsubstituted or substituted C₆-C₂₄aryl or unsubstituted or substituted heteroaryl,
R, R₁ and R₂ are each independently of the others hydrogen, C₁-C₆alkyl, halogen, cyano, CF₃, nitro, NR₃R₄, COOR₄, NR₄COR₃, COO⁻X⁺, COR₄, OR₄, SR₃, SO₂R₃, SO₂NR₃R₄, SO₃⁻X⁺, or C₆-C₂₄aryl which is unsubstituted or mono- or poly-substituted by R₅,

R₃ is C₁-C₆alkyl, or C₆-C₁₂aryl which is unsubstituted or mono- or poly-substituted by halogen, hydroxy, OR₇, cyano, nitro, SR₇, NR₆R₇, COOR₇, CONR₆R₇, NR₆COR₇, NR₆COOR₇, COO⁻X⁺, COR₄, OR₄, SO₂R₇, SO₂NR₆R₇, SO₃⁻X⁺ or by SO₃R₇,

R₄ is hydrogen or has the meanings of R₃,

R₅ is hydrogen, C₁-C₄alkyl, halogen, nitro, NR₇R₈ or OR₇,

R₆ is hydrogen or C₁-C₃alkyl,

R₇ and R₈ are each independently of the other hydrogen; C₁-C₃alkyl; phenyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR₅, NR₁₆R₁₇; or benzyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR₅, NR₁₆R₁₇, and

X⁺ is a cation H⁺, Li⁺, Na⁺, K⁺, Mg⁺⁺_{1/2}, Ca⁺⁺_{1/2}, Sr⁺⁺_{1/2}, Ba⁺⁺_{1/2}, Cu⁺, Cu⁺⁺_{1/2}, Zn⁺⁺_{1/2}, Mn⁺⁺_{1/2},

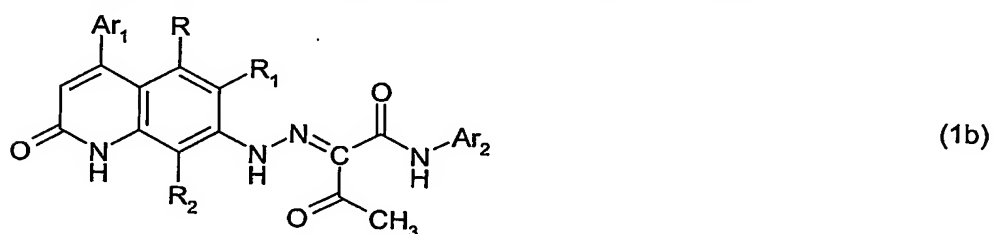
Al⁺⁺⁺_{1/3} or [NR₉R₁₀R₁₁R₁₂]⁺, wherein R₉, R₁₀, R₁₁ and R₁₂ are each independently of the others

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hydrogen; C₁-C₆alkyl; phenyl which is unsubstituted or mono- or poly-substituted by C₁-C₆alkyl, halogen, nitro, OR₅, NR₁₆R₁₇; or benzyl which is unsubstituted or mono- or poly-substituted by C₁-C₆alkyl, halogen, nitro, OR₅, NR₁₆R₁₇, and

R₁₆ and R₁₇ are each independently of the other hydrogen or C₁-C₆alkyl.

2. A monoazoquinolone pigment according to claim 1, of formula



wherein

Ar₁ and Ar₂ are each independently of the other unsubstituted or substituted C₆-C₂₄aryl or unsubstituted or substituted heteroaryl,

R, R₁ and R₂ are each independently of the others hydrogen, C₁-C₆alkyl, halogen, cyano, CF₃, nitro, NR₃R₄, COOR₄, NR₄COR₃, COO⁻X⁺, COR₄, OR₄, SR₃, SO₂R₃, SO₂NR₃R₄, SO₃⁻X⁺, or C₆-C₂₄aryl which is unsubstituted or mono- or poly-substituted by R₅,

R₃ is C₁-C₆alkyl, or C₆-C₁₂aryl which is unsubstituted or mono- or poly-substituted by halogen, hydroxy, OR₇, cyano, nitro, SR₇, NR₆R₇, COOR₇, CONR₆R₇, NR₆COR₇, NR₆COOR₇, COO⁻X⁺, COR₄, OR₄, SO₂R₇, SO₂NR₆R₇, SO₃⁻X⁺ or by SO₃R₇,

R₄ is hydrogen or has the meanings of R₃,

R₅ is hydrogen, C₁-C₄alkyl, halogen, nitro, NR₇R₈ or OR₇,

R₆ is hydrogen or C₁-C₃alkyl,

R₇ and R₈ are each independently of the other hydrogen; C₁-C₃alkyl; phenyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR₅, NR₁₆R₁₇; or benzyl which is unsubstituted or mono- or poly-substituted by halogen, nitro, OR₅, NR₁₆R₁₇, and

X⁺ is a cation H⁺, Li⁺, Na⁺, K⁺, Mg⁺⁺_{1/2}, Ca⁺⁺_{1/2}, Sr⁺⁺_{1/2}, Ba⁺⁺_{1/2}, Cu⁺, Cu⁺⁺_{1/2}, Zn⁺⁺_{1/2}, Mn⁺⁺_{1/2}, Al⁺⁺⁺_{1/3} or [NR₉R₁₀R₁₁R₁₂]⁺, wherein R₉, R₁₀, R₁₁ and R₁₂ are each independently of the others hydrogen; C₁-C₆alkyl; phenyl which is unsubstituted or mono- or poly-substituted by C₁-C₆alkyl, halogen, nitro, OR₅, NR₁₆R₁₇; or benzyl which is unsubstituted or mono- or poly-substituted by C₁-C₆alkyl, halogen, nitro, OR₅, NR₁₆R₁₇, and

R₁₆ and R₁₇ are each independently of the other hydrogen or C₁-C₆alkyl.

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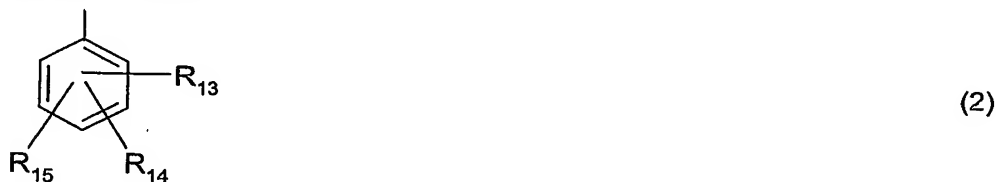
3. A monoazoquinolone pigment according to either claim 1 or claim 2, wherein Ar_1 is a radical of formula



wherein

R_{13} , R_{14} and R_{15} are each independently of the others hydrogen, C_1 - C_6 alkyl, halogen, cyano, CF_3 , nitro, NR_3R_4 , $COOR_4$, NR_4COR_3 , COO^-X^+ , COR_4 , OR_4 , SR_3 , SO_2R_3 , $SO_2NR_3R_4$, SO_3R_4 , $SO_3^-X^+$, or C_6 - C_{12} aryl which is unsubstituted or mono- or poly-substituted by R_5 .

4. A monoazoquinolone pigment according to either claim 2 or claim 3, wherein Ar_2 is a radical of formula



wherein

R_{13} , R_{14} and R_{15} are each independently of the others hydrogen, C_1 - C_6 alkyl, halogen, cyano, CF_3 , nitro, NR_3R_4 , $COOR_4$, NR_4COR_3 , COO^-X^+ , COR_4 , OR_4 , SR_3 , SO_2R_3 , $SO_2NR_3R_4$, SO_3R_4 , $SO_3^-X^+$, or C_6 - C_{12} aryl which is unsubstituted or mono- or poly-substituted by R_5 .

5. A monoazoquinolone pigment according to any one of claims 1 to 4, wherein R_1 and R_2 are each independently of the other hydrogen, C_1 - C_3 alkyl, C_1 - C_3 alkoxy, chlorine, $COOR_5$, NR_4COR_3 , COO^-X^+ or $SO_3^-X^+$, R_5 is hydrogen or C_1 - C_3 alkyl and X^+ is a cation Na^+ , $Mg^{++}_{1/2}$, $Ca^{++}_{1/2}$, $Sr^{++}_{1/2}$, $Ba^{++}_{1/2}$ or $[NR_9R_{10}R_{11}R_{12}]^+$, wherein R_9 , R_{10} , R_{11} and R_{12} are each independently of the others hydrogen; C_1 - C_6 alkyl; phenyl which is unsubstituted or mono- or poly-substituted by C_1 - C_3 alkyl, halogen, nitro, OR_7 , $N(R_7)_2$; or benzyl which is unsubstituted or mono- or poly-substituted by C_1 - C_3 alkyl, halogen, nitro, OR_7 , $N(R_7)_2$.

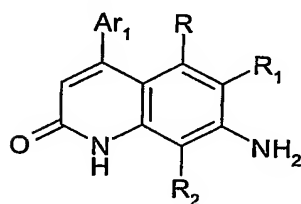
6. A monoazoquinolone pigment according to any one of claims 1 to 4, wherein R_1 and R_2 are each independently of the other hydrogen, C_1 - C_2 alkyl, C_1 - C_2 alkoxy, chlorine, $COOR_5$, NR_4COR_3 , COO^-X^+ or $SO_3^-X^+$, R_5 is hydrogen or C_1 - C_2 alkyl and X^+ is a cation Na^+ , $Mg^{++}_{1/2}$,

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$\text{Ca}^{++}_{1/2}$, $\text{Sr}^{++}_{1/2}$, $\text{Ba}^{++}_{1/2}$ or $[\text{NR}_9\text{R}_{10}\text{R}_{11}\text{R}_{12}]^+$, wherein R_9 , R_{10} , R_{11} and R_{12} are each independently of the others hydrogen, $\text{C}_1\text{-C}_6$ alkyl, phenyl which is unsubstituted or mono- or poly-substituted by $\text{C}_1\text{-C}_2$ alkyl and/or by halogen, or benzyl which is unsubstituted or mono- or poly-substituted by $\text{C}_1\text{-C}_2$ alkyl and/or by halogen.

7. A monoazoquinolone pigment according to claim 6, wherein R_1 and R_2 are each independently of the other hydrogen, $\text{C}_1\text{-C}_2$ alkyl, $\text{C}_1\text{-C}_2$ alkoxy, chlorine, COOR_5 or NR_4COR_3 and R_5 is hydrogen or $\text{C}_1\text{-C}_2$ alkyl.

8. A process for the preparation of a monoazoquinolone pigment of formula (1) according to claim 1, wherein a compound of formula



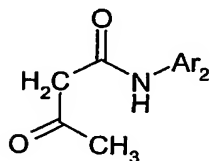
(50)

is diazotised and coupled to a compound of formula

W-H

(51)

or to a compound of formula



(51a),

wherein Ar_1 , W, R, R_1 and R_2 are as defined for formula (1) in claim 1 and Ar_2 is as defined for formula (1a) in claim 1.

9. The use of a monoazoquinolone pigment according to claim 1 in the colouring of high molecular weight material.

10. The use of a monoazoquinolone pigment according to claim 1 as a colourant for plastics, surface coatings or printing inks.

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11. The use of a monoazoquinolone pigment according to claim 1 as a colourant in the production of colour filters.